

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

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1. (currently amended): Heat exchanger (2) comprising an exchanger block or a number of aligned exchanger blocks (20), where fluids are circulated in a heat-exchange relationship, at least one face of each block comprising inlet openings (204) for at least one of the fluids, the inlet openings in the same face of each block for this fluid being in communication with the interior space of the same fluid supply box (21) which runs alongside the [[said]] face thereof, and which communicates with at least one analogous box of an adjacent block if there is one, to form a fluid supply line, the exchanger being characterized in that the fluid supply line contains at least one grating (30) arranged across the line and having through-perforations (301) and solid parts (302) which are distributed in such a way as to create, at locations on the surface of the grating, pressure drops which are such that the flow velocities of the fluid in the inlet openings downstream of the grating (30) have similar values,

and the distribution of the fluid in the inlet openings (204) and in the supply line downstream of the grating (30) and upstream in the vicinity thereof, is approximately uniform, and characterized in that the grating (30) has perforations distributed non-uniformly over its surface.

2. (canceled).

3. (currently amended): Heat exchanger according to Claim [[2]]1, characterized in that the grating (30) has through-perforations (301) with a degree of perforation on its surface which varies over its surface approximately in the opposite direction to the value of the flow velocities at the same locations in the absence of the grating.

4. (original): Heat exchanger according to Claim 3, characterized in that the degree of perforation varies over the surface of the grating (30) substantially in inverse proportion to the flow velocities at the same locations in the absence of the grating.

5. (currently amended): Heat exchanger according to Claim [[2]]1, characterized in that the grating (30) has several juxtaposed regions each having one same degree of perforation on their surfaces, and respective degrees of perforation that differ from one region to an adjacent region.

6. (currently amended): Heat exchanger according to Claim [[2]]1, characterized in that the grating (30) has at least one region consisting of a notch or a cut-out.

7. (currently amended): Heat exchanger according to Claim [[2]]1, characterized in that the grating (30) has at least one continuous region with no perforations representing a substantial fraction of its area.

8. (previously presented): Heat exchanger according to Claim 1, characterized in that the grating (30) extends over a cross section of the line.

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9. (previously presented): Heat exchanger according to Claim 1, characterized in that the grating (30) extends over a cross section of the line at right angles to its axis.

10. (previously presented): Heat exchanger according to Claim 1, characterized in that the grating (30) is arranged at an angle in the supply line.

11. (previously presented): Heat exchanger according to Claim 1, characterized in that the grating (30) extends over the entire area of a cross section of the line.

12. (currently amended): ~~Heat exchanger according to Claim 1,~~ Heat exchanger (2) comprising an exchanger block or a number of aligned exchanger blocks (20), where fluids are

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circulated in a heat-exchange relationship, at least one face
of each block comprising inlet openings (204) for at least one
of the fluids, the inlet openings in the same face of each
block for this fluid being in communication with the interior
space of the same fluid supply box (21) which runs alongside
the face thereof, and which communicates with at least one
analogous box of an adjacent block if there is one, to form a
fluid supply line, the exchanger being characterized in that
the fluid supply line contains at least one grating (30)
arranged across the line and having through-perforations (301)
and solid parts (302) which are distributed in such a way as
to create, at locations on the surface of the grating,
pressure drops which are such that the flow velocities of the
fluid in the inlet openings downstream of the grating (30)
have similar values, and the distribution of the fluid in the
inlet openings (204) and in the supply line downstream of the
grating (30) and upstream in the vicinity thereof, is
approximately uniform, and characterized in that the grating
(30) extends over an area smaller than a cross section of the
line.

13. (previously presented): Heat exchanger according
to Claim 1, comprising a supply line having a tapping (211)

exhibiting a circular cross section at right angles to its axis and connected to supply boxes (21) having a semicircular cross section at right angles to their axis, characterized in that the grating (30) is arranged in a supply box near the tapping.

14. (previously presented): Heat exchanger according to Claim 1, characterized in that the supply line contains several gratings (30).

15. (previously presented): Heat exchanger according to Claim 1, comprising two supply lines, characterized in that each line contains at least one grating (30).

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16. (currently amended): Heat exchanger according to Claim 1, characterized in that the [[said]] fluid circulating through the fluid supply line is in the gaseous state.

17. (currently amended): Reboiler-condenser, ~~characterized in that it comprises one~~ comprising a heat exchanger according to Claim 1.

18. (currently amended): Reboiler-condenser of an air separator unit, ~~characterized in that it comprises~~ comprising at least one heat exchanger according to Claim 1.

19. (new) Reboiler-condenser, comprising a heat exchanger according to Claim 12.

20. (new) Reboiler-condenser of an air separator
unit, comprising at least one heat exchanger according to Claim
12.

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